SEOUL NUCLEAR SECURITY SUMMIT: NATIONAL REPORT OF THE REPUBLIC OF SOUTH AFRICA, 27 MARCH 2012

International Legally Binding and Related Instruments

South Africa is party to the Convention for the Suppression of Acts of Nuclear Terrorism and the Convention on the Physical Protection of Nuclear Material (CPPNM). Relevant South African Government structures are in the process of obtaining approval to adhere to the 2005 Amendment to the CPPNM.

South Africa endorsed the IAEA Code of Conduct on the Safety and Security of Radioactive Sources, and subscribes to the Code's supplementary Guidance on the Import and Export of Radioactive Sources.

South Africa follows the guidance and recommendations provided by the IAEA in its INFCIRC/225/Rev.5, related to the physical protection of nuclear material and nuclear facilities.

Co-operation with the IAEA

The IAEA has evaluated radioactive sources and nuclear material at the Pelindaba nuclear facility and the Koeberg Nuclear Power Plant, and also conducted an Operational Safety Review Team (OSART) Mission from 28 August to 8 September 2011, upon the request of the South African Government.

In 2009, South Africa approached the IAEA to conduct a Safety Assessment of Long-Term Operation (SALTO) of the Koeberg Nuclear Power Plant, which has been in operation since 1984. The SALTO mission was conducted from 14 to 18 March 2011.

South Africa and the IAEA co-operated during the 2010 World Cup to enhance nuclear security for nuclear installations including security of radioactive sources. The IAEA also assisted South Africa with regard to nuclear security measures at the different World Cup venues.

Nuclear Materials

The Nuclear Energy Corporation of South Africa (NECSA) subsidiary, NTP Radioisotopes, is one of the leading suppliers of molybdenum-99. With the assistance of the Government of the United States of America (US), NTP recently successfully converted their Mo-99 production to use Low Enriched Uranium (LEU) targets.

After the conversion of the nuclear research reactor, SAFARI-1, utilised at the Pelindaba nuclear facility of NECSA, from a Highly Enriched Uranium (HEU) to use Low Enriched Uranium (LEU), South Africa repatriated the US origin HEU fuel used in this reactor back to the United States of America.

Radioactive Sources

In cooperation with the IAEA, NECSA also developed the so-called mobile hot cell facility, providing developing countries with a specialized facility to safely and securely

store high-activity radioactive sources after being used in medical applications and/or to secure orphan sources.

In this regard, South Africa is continuing with its programme to recover, consolidate and return disused and orphan radioactive sources throughout Africa and some non-African countries.

Nuclear Regulation

South Africa has in place a wide-ranging legislative and regulatory framework that enables relevant South African authorities to deal with issues related to nuclear security and safety, which includes the Nuclear Energy Act, 1999 (Act 46 of 1999) and the National Nuclear Regulator Act, 1999 (Act 47 of 1999). Other related legislation include Non-Proliferation of Weapons of Mass Destruction Act, 1993 (Act 87 of 1993); National Radioactive Waste Disposal Institute Act, 2008 (Act 53 of 2008); the Hazardous Substances Act, 1973 (Act 15 of 1973); National Strategic Intelligence Act, 1994 (Act 39 of 1994); National Key Points Act, 1980 (Act 102 of 1980); Disaster Management Act, 2002, (Act 57 of 2002); and the Protection of Constitutional Democracy Against Terrorist and Related Activities Act, 2004 (Act No. 33 of 2004).